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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

PATEL, HARESH N

ART UNIT	PAPER NUMBER
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2126

DATE MAILED: 10/02/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/751,190

Applicant(s)

HENDLER ET AL.

Examiner

Haresh Patel

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-27 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 December 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: ____

DETAILED ACTION

1. Claims 1-27 are presented for examination.

Oath/Declaration

2. Signature of the fifth inventor (Shmuel Melamed) is missing.

Specification

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (e) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.
- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).

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(k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

3. The disclosure is objected to because of the following informalities:

- i. CROSS-REFERENCE TO RELATED APPLICATIONS (Copending applications) is missing.

Appropriate correction is required.

4. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: "System and method to stream Java Archive files from a server to a client device in sequence".

5. Applicant is reminded of the proper content of an abstract of the disclosure.

A patent abstract is a concise statement of the technical disclosure of the patent and should include that which is new in the art to which the invention pertains. If the patent is of a basic nature, the entire technical disclosure may be new in the art, and the abstract should be directed to the entire disclosure. If the patent is in the nature of an improvement in an old apparatus, process, product, or composition, the abstract should include the technical disclosure of the improvement. In certain patents, particularly those for compounds and compositions, wherein the process for making and/or the use thereof are not obvious, the abstract should set forth a process for making and/or use thereof. If the new technical disclosure involves modifications or alternatives, the abstract should mention by way of example the preferred modification or alternative.

The abstract should not refer to purported merits or speculative applications of the invention and should not compare the invention with the prior art.

Where applicable, the abstract should include the following:

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- (1) if a machine or apparatus, its organization and operation;
- (2) if an article, its method of making;
- (3) if a chemical compound, its identity and use;
- (4) if a mixture, its ingredients;
- (5) if a process, the steps.

Extensive mechanical and design details of apparatus should not be given.

The abstract of the disclosure is objected to because it does not contain computer terminology. Key terms involved in the invention like "Java" and "JAR file" are missing in the abstract. Correction is required. See MPEP § 608.01(b).

Drawings

6. Figures 2 and 4 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Information Disclosure Statement

7. An initialed and dated copy of Applicant's IDS forms 1449 is attached to the instant Office action.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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8. Claim 2 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "a ZIP file end-of-central-directory record" in claim 2 renders the claim indefinite.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 1-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over White et al. 6,230,184 (Hereinafter White).

10. As per claims 1, 11, 20, 24 and 27, White teaches the following:

a method of streaming an archive file from a server to a client device (e.g., a client can download a document from or send an electronic mail message to another computer using the internet col. 1, lines 42 – 55), the method comprising,

a computer-implemented method of transmitting data in an archive file from a server device to a client device (e.g., a request is a message from the client to the server asking for something, such as a classfile or jar file, col 4, lines 30 – 67), the client device comprising an execution environment configured to provide ones of a collection of logically separate files in a

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received archive file to an executing application in an execution-time determined order (e.g., A JAR file, for example, enables the user to place a collection of compressed files into a single archive file, col. 4, lines 30 –67), the method comprising,

a data storage apparatus comprising instructions to configure a computer to,
a system for transferring information modules between computers, the system comprising:

at a server, extracting ones of a plurality of modules from a first archive file (e.g., figure 7, Once optimized file 730 is created, an optimized version of program 700, called the optimized program 725, is stored on server 751 in data store 775. The optimized program 725 comprises an optimized file 730 and one or more additional files 770 (e.g. remainder files 635), col. 13 lines 1 – 16),

receiving the streamed modules at the client device (e.g., figure 7, When a client computer issues a request to server 751 for the optimized program 725 the optimized file 730 is sent first through the network 760. Additional files 770 may be subsequently sent to the client computer during or after execution of the optimized file 730, col. 13, lines 1 – 16),

automatically constructing a second archive file at the client device (e.g., figure 7, When a client computer issues a request to server 751 for the optimized program 725 the optimized file 730 is sent first through the network 760. Additional files 770 may be subsequently sent to the client computer during or after execution of the optimized file 730, col. 13, lines 1 – 16),

the second archive file comprising the received modules (e.g., figure 7, When a client computer issues a request to server 751 for the optimized program 725 the optimized file 730 is

sent first through the network 760. Additional files 770 may be subsequently sent to the client computer during or after execution of the optimized file 730, col. 13, lines 1 – 16), and

providing data from at least one of the received modules in the second archive to an executing application (e.g., figure 7, When a client computer issues a request to server 751 for the optimized program 725 the optimized file 730 is sent first through the network 760.

Additional files 770 may be subsequently sent to the client computer during or after execution of the optimized file 730, col. 13, lines 1 – 16),

streaming the extracted modules from the server to the client device (e.g., figure 7, When a client computer issues a request to server 751 for the optimized program 725 the optimized file 730 is sent first through the network 760. Additional files 770 may be subsequently sent to the client computer during or after execution of the optimized file 730, col. 13, lines 1 – 16).

However White does not specifically show the use of streaming the extracted modules from the server to the client. “Official Notice” is taken that both the concept and advantages of providing the streaming data to the user is well known and expected in the art.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include streaming of the extracted modules data with the teachings of White in order to facilitate display of animation information and/or to provide streaming audio to the user at the client device.

11. As per claims 2-10, 12-19, 21-23, 25 and 26, White teaches the following:

the first archive file is a Java Archive file (e.g., compressed file, col. 5, line 7 – col 6. line 58); a first one of the streamed modules comprises a ZIP file end-of-central-directory record

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(e.g., zip file, col. 5, line 7 – col. 6, line 58); and the method further comprises allocating storage space at the client device for the second archive based on size information in the end-of-central-directory record (e.g., size of zip file, col. 5, line 7 – col. 6, line 58),

the client device comprises a Java Micro Edition execution environment (e.g., Java runtime environment, col. 3, lines 1 – 67),

streaming comprises streaming in accordance with predetermined criteria predicting an order of utilization of modules at the client device (e.g., desired state of computer, abstract),

a first one of the streamed modules comprises a Java class file (e.g., java applet, for example, is comprised of classfiles, image files, sound files, data files, etc, col. 5, line 7 – col. 6, line 58),

the executing application comprises a Java application (e.g., java applet, col. 5, line 7 – col. 6, line 58); and providing data from at least one of the stored file to the executing application comprises dynamically loading the Java class file for access by the Java application (e.g., Java runtime environment, col. 3, lines 1 – 67),

at least one of the modules in the Java Archive file comprises Java Archive meta information comprising an identification of files in other ones of the modules; and the method further comprises streaming the meta- information from the server to the client device and validating a file in a received modules using the meta-information (e.g., The following steps, for example, enable the user to create a JAR file: 1) manually identify the files to be placed in the JAR file 2) create a manifest file 3) if the files in the JAR archive are going to be digitally signed, the appropriate digital signature files are placed in a subdirectory called META-INF 4) combine the META-INF files with the other files and create a single ZIP file, col. 5 lines 1 – 67),

validating comprises comparing a file name and path associated with a file received in a streamed module to a file name and path specified in the meta- information (e.g., The following steps, for example, enable the user to create a JAR file: 1) manually identify the files to be placed in the JAR file 2) create a manifest file 3) if the files in the JAR archive are going to be digitally signed, the appropriate digital signature files are placed in a subdirectory called META-INF 4) combine the META-INF files with the other files and create a single ZIP file, col. 5 lines 1 – 67),

the meta-information comprises a first digital signature and the method further comprises: computing a second digital signature based on data in a first one of the received modules; and comparing the second digital signature to the first digital signature to determine validity of a file received in a streamed module (e.g., The following steps, for example, enable the user to create a JAR file: 1) manually identify the files to be placed in the JAR file 2) create a manifest file 3) if the files in the JAR archive are going to be digitally signed, the appropriate digital signature files are placed in a subdirectory called META-INF 4) combine the META-INF files with the other files and create a single ZIP file, col. 5 lines 1 – 67),

at the client device, processing a request from the executing application to access a file in a first one of the modules: and determining if the first module is present in the second archive; sending streaming control data to the server to request the first module when the first module is not present in the second archive, and streaming the first module from the server to the client device in response to receipt of said streaming control data at the server (e.g., For example, if Java applet 200 is contained in an archive file 300 named jarFilejar the following HTML code results in a request for the file named jarFilejar. When a request is made the file jarFilejar applet

200 is transferred from server 259 to client 251. The archive attribute can list one or more jar files, all of which will be downloaded before the applet begins execution, col. 6 lines 1 – 67),

streaming the first module in response to the receipt of said streaming control data comprises interrupting streaming of another one of the modules (e.g., For example, if Java applet 200 is contained in an archive file 300 named jarFilejar the following HTML code results in a request for the file named jarFilejar. When a request is made the file jarFilejar applet 200 is transferred from server 259 to client 251. The archive attribute can list one or more jar files, all of which will be downloaded before the applet begins execution, col. 6 lines 1 – 67),

the second archive file comprises a different arrangement of the streamed files than in the first file, said different arrangement being functionally equivalent to an arrangement of files in the first archive file (e.g., For example, if Java applet 200 is contained in an archive file 300 named jarFilejar the following HTML code results in a request for the file named jarFilejar. When a request is made the file jarFilejar applet 200 is transferred from server 259 to client 251. The archive attribute can list one or more jar files, all of which will be downloaded before the applet begins execution, col. 6 lines 1 – 67),

the first archive comprises at least one file comprising non-executable data and at least one file comprising executable program code (e.g., an applet or application, col. 6, lines 1-67),

ordering the separate files extracted from the archive file based on criteria predicting an order of utilization of the separate files at the second computing device; and streaming the separate files from the first computer to the second computer in accordance with the ordering,

the criteria comprises data stored at the first computer in a streaming control database; and the method further comprises: receiving a request at the first computer from the second

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computer; and modifying the predictive data stored in the streaming control database based on the request,

the criteria comprise data stored at the first computer in a streaming control database comprising transition records associating weighted values with execution transitions between selected files in the collection; and ordering the separate files comprises ordering based on transition record values,

ordering based on transition record values comprises processing transition record information using a path determination algorithm (e.g., This command generates a compressed JAR file. The jar command also generates a default manifest file called MANIFEST.MF and places it in a directory called META-INF. The manifest file is a file that contains information about the files packaged in the JAR file. The c option indicates that the user wants to create a JAR file. The f option indicates that the output is sent to a file rather than to an output stream. The c and the f option can appear in any order, but should not be separated by a space. The jar-file argument is the name of the JAR file the user wants to create. The input-file(s) argument is a space-delimited list of one or more files the user wants to place in the JAR file. The input-file(s) argument can contain a wildcard (*) symbol. If any of the input-file(s) are directories, the contents of these directories are added to the JAR file recursively, col. 5, lines 29 – 43),

receiving a first module in the module set while an application is executing; storing the first module on local storage media at the second computer; and wherein the method further comprises integrating the first module with the executing application (e.g., This command generates a compressed JAR file. The jar command also generates a default manifest file called MANIFEST.MF and places it in a directory called META-INF. The manifest file is a file that

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contains information about the files packaged in the JAR file. The c option indicates that the user wants to create a JAR file. The f option indicates that the output is sent to a file rather than to an output stream. The c and the f option can appear in any order, but should not be separated by a space. The jar-file argument is the name of the JAR file the user wants to create. The input-file(s) argument is a space-delimited list of one or more files the user wants to place in the JAR file. The input-file(s) argument can contain a wildcard (*) symbol. If any of the input-file(s) are directories, the contents of these directories are added to the JAR file recursively, col. 5, lines 29 – 43),

the instructions to construct in accordance with ZIP file format specifications further comprise instructions to position received ones of the modules in the second archive in an order of receipt of the modules and instructions to alter data in the second archive's central directory header to indicate the placement of the ones of the modules in the second archive (e.g., This command generates a compressed JAR file. The jar command also generates a default manifest file called MANIFEST.MF and places it in a directory called META-INF. The manifest file is a file that contains information about the files packaged in the JAR file. The c option indicates that the user wants to create a JAR file. The f option indicates that the output is sent to a file rather than to an output stream. The c and the f option can appear in any order, but should not be separated by a space. The jar-file argument is the name of the JAR file the user wants to create. The input-file(s) argument is a space-delimited list of one or more files the user wants to place in the JAR file. The input-file(s) argument can contain a wildcard (*) symbol. If any of the input-file(s) are directories, the contents of these directories are added to the JAR file recursively, col. 5, lines 29 – 43),

the instructions further comprise instructions to: process a request from an executing application to access data in a first one of the modules; determine if the first module is present in the second archive; send control data to the other computer to request the first module when the first module is not present in the second archive (e.g., This command generates a compressed JAR file. The jar command also generates a default manifest file called MANIFEST.MF and places it in a directory called META-INF. The manifest file is a file that contains information about the files packaged in the JAR file. The c option indicates that the user wants to create a JAR file. The f option indicates that the output is sent to a file rather than to an output stream. The c and the f option can appear in any order, but should not be separated by a space. The jar-file argument is the name of the JAR file the user wants to create. The input-file(s) argument is a space-delimited list of one or more files the user wants to place in the JAR file. The input-file(s) argument can contain a wildcard (*) symbol. If any of the input-file(s) are directories, the contents of these directories are added to the JAR file recursively, col. 5, lines 29 – 43),

instructions to order the extracted modules based on criteria predicting an order of utilization of the modules at the client device and wherein the instructions to stream comprise instructions to stream in accordance with the ordering of the modules (e.g., This command generates a compressed JAR file. The jar command also generates a default manifest file called MANIFEST.MF and places it in a directory called META-INF. The manifest file is a file that contains information about the files packaged in the JAR file. The c option indicates that the user wants to create a JAR file. The f option indicates that the output is sent to a file rather than to an output stream. The c and the f option can appear in any order, but should not be separated by a space. The jar-file argument is the name of the JAR file the user wants to create. The

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input-file(s) argument is a space-delimited list of one or more files the user wants to place in the JAR file. The input-file(s) argument can contain a wildcard (*) symbol. If any of the input-file(s) are directories, the contents of these directories are added to the JAR file recursively, col. 5, lines 29 – 43),

the instructions to order the extracted modules comprise instructions to order in accordance with criteria retrieved from a streaming control database (e.g., This command generates a compressed JAR file. The jar command also generates a default manifest file called MANIFEST.MF and places it in a directory called META-INF. The manifest file is a file that contains information about the files packaged in the JAR file. The c option indicates that the user wants to create a JAR file. The f option indicates that the output is sent to a file rather than to an output stream. The c and the f option can appear in any order, but should not be separated by a space. The jar-file argument is the name of the JAR file the user wants to create. The input-file(s) argument is a space-delimited list of one or more files the user wants to place in the JAR file. The input-file(s) argument can contain a wildcard (*) symbol. If any of the input-file(s) are directories, the contents of these directories are added to the JAR file recursively, col. 5, lines 29 – 43), and

modify the criteria stored in the streaming control database based on a module request received from the second computer (e.g., This command generates a compressed JAR file. The jar command also generates a default manifest file called MANIFEST.MF and places it in a directory called META-INF. The manifest file is a file that contains information about the files packaged in the JAR file. The c option indicates that the user wants to create a JAR file. The f option indicates that the output is sent to a file rather than to an output stream. The c and the f

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option can appear in any order, but should not be separated by a space. The jar-file argument is the name of the JAR file the user wants to create. The input-file(s) argument is a space-delimited list of one or more files the user wants to place in the JAR file. The input-file(s) argument can contain a wildcard (*) symbol. If any of the input-file(s) are directories, the contents of these directories are added to the JAR file recursively, col. 5, lines 29 – 43),

Conclusion

12. This application is a continuation in part of application number 09/120,575, which does not teach the entire claimed invention.

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

See Form PTO-892.

Getchius et al. (6,408, 294) clearly teaches a system for performing online data queries that displays advertisements based on the client request terms for the business listing. The machine executable code identifies terms that are related to one or more of client terms associated with a business listing. Getchius teaches web-based systems for streaming additional advertisement web site elements that are related to the client request.

Barry (6, 615,258) teaches an integrated data management system for providing data management services from an enterprise over the Internet. Barry teaches mechanism to decrease the user perceived system response time in web-based systems. Barry teaches usage streaming of JAR files from a server to a client device.

Jones (6,256,623) teaches the portal host system containing search clip records and one or more tags identifying search words or topics that the clip is related to, to identify related topics.

Forbes et al. (6,381,742) also teaches streaming of JAR files from a server to a client device.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Haresh Patel whose telephone number is (703) 605-5234. The examiner can normally be reached on Monday-Friday from 8:00 am to 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Follansbee, can be reached at (703) 305-8498.

The appropriate fax phone number for the organization where this application or proceeding is assigned is (703) 306-5404.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

Haresh Patel

September 17, 2003.



**JOHN FOLLANSBEE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100**